

MATERIAL SAFETY DATA SHEET



UNIVERSAL FOREST PRODUCTS, INC. 2801 East Beltline NE, Grand Rapids, Michigan 49525 (616) 364-6161 www.ufpi.com

SECTION 1 – PRODUCT IDENTIFICATION

PRODUCT NAME:	CCA PRESSURE-TREATED WOOD	
SYNONYMS:	Pressure-treated wood with chromated copper arsenate (CCA). CCA with water repellant; CCA treated wood products with mold inhibitor; CCA treated formaldehyde bonded products.	
DESCRIPTION:	Wood, often green colored.	
PURPOSE:	For use where wood is subject to decay or termite attack.	
PREPARED BY:	Compliance Department.	

SECTION 2 – HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

CAS NUMBER	HAZARDOUS INGREDIENT	PERCENT ⁴	<u>OSHA</u>		<u>ACGIH</u>	
			PEL	STEL	TLV	STEL
7440-50-8	Copper Oxide (dusts/mists)	<5	1.0 mg/cu. m	none	1.0 mg/cu. m	none
7440-47-3	Trivalent Chromium	<5	0.5 mg/cu. m (as Cr)	none	0.5 mg/ cu. m	none
7440-38-2	Arsenic Pentoxide ¹	<5	0.01 mg/cu. m	none	0.01 mg/ cu. m	none
N/A	Wood Dust ²	90-99.5	5 mg/cu. m	none	5 mg/ cu. m	10 mg/cu. m
50-00-0	Formaldehyde ³	0-8	0.75 ppm	2 ppm	0.3 ppm	none

¹ The arsenic pentoxide present in this product is not subject to OSHA arsenic standard 29 CFR 1910.1801

SECTION 3 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Solid wood, light brown to green color Specific Gravity: Same as species treated Wood odor Vapor Pressure: Not Available Odor: Boiling Point: Not Applicable Vapor Density: Not Applicable Melting Point: Not Applicable Not Applicable Density: Freezing Point: Not Applicable % Volatile by volume: Not Applicable Weight per Gallon: Not Applicable Solubility (H2O): Not Applicable Evaporation Rate: Not Applicable Reactivity (H2O): Not Applicable

SECTION 4 – FIRE AND EXPLOSION HAZARD

Flash Point	Method	Upper/Lower Flammable Limit	Auto-ignition	Rate of Burn	Classification
273 °C	Not Applicable	Not Available	273 °C	Not Available	Combustible

Unusual Fire and Explosion Hazards: Wood is combustible, and wood dusts may form explosive mixtures with air in the presence of an ignition source. Wear self-contained breathing apparatus. Smoke from wood and chemicals within may contain toxic vapors. Ashes may contain toxic compounds. Wear full protective equipment and air supply.

Fire Fighting Equipment and Extinguishing Media: Use water to wet down wood to reduce the likelihood of ignition. Fire fighters should use full protective clothing including self-contained breathing apparatus. Use water spray, foam, carbon dioxide, dry chemical fog.

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²Some states may have more restrictive PEL's for wood Dust. Consult your individual state offices for details.

³Formadehyde is present only in products bonded with formaldehyde-based glues.

⁴Due to the natural variability in wood and the variability in treatment, actual values may vary.

Hazardous Decomposition Products: Product is stable and non-reactive under normal conditions. Ash resulting from combustion contains arsenic, chromium, and copper. Combustion products may include smoke, oxides of carbon, nitrogen, chrome, and arsenic. Contact with strong acid may release metals.

NFPA Codes: Health 1 HMIS Codes: Health 1 Flammability Flammability 1 1 Reactivity 0 Reactivity 0 Other N/A Protection В

SECTION 5 – HEALTH HAZARDS AND FIRST AID

WARNING! DO NOT BURN CCA PRESSURE-TREATED WOOD. Wood dust may form an explosive mixture with air, use exhaust ventilation when cutting, sawing or grinding in an enclosed area. Wood dust may cause irritation to eyes, skin, and upper respiratory tract. When cutting, sanding, or grinding avoid inhalation and wear safety glasses. Handling may cause splinters, use puncture resistant gloves. Observe good hygiene and safety practices when handling this product.

	Signs and symptoms of acute overexposure	First Aid Measures
Eyes:	Wood dust may cause irritation to the eyes.	Immediately flush eyes with water for at least 15
	Symptoms can include irritation, redness, scratching	minutes. Seek medical attention if symptoms persist
	of the cornea, and tearing	
Skin:	Wood dust may cause irritation to the skin.	For skin irritation flush immediately with soap and
	Mechanical rubbing may increase skin irritation.	water, continue at least 15 minutes. If irritation
	Some wood species and their dusts may contain	persists, get medical attention immediately. If wood
	natural toxins, which may cause dermatitis or	splinters are injected under the skin, get medical
	allergic reactions in sensitized individuals.	attention immediately.
Ingestion:	Ingestion of wood dusts is unlikely. If ingestion	If the material is swallowed, get medical attention or
	does occur, slight gastrointestinal irritation may	advice. Rinse the victim's mouth out with water.
	result. Certain species of wood and their dusts may	Induce vomiting if directed by a physician or Poison
	contain natural toxins, which can have adverse	Control Center.
	effects on humans. A single ingestion by a small	
	child of a large amount (approx. 2.5 oz.) of treated	
	wood dust may require immediate medical attention.	
	See NOTES TO PHYSICIAN and SECTION 8.	
Inhalation:	Wood dust is irritating to the nose throat and lungs.	If dusts are inhaled, remove person to fresh air. If
	Symptoms may include nasal dryness, deposits or	symptoms persist, seek medical attention.
	obstructions in the nasal passages, coughing,	
	sneezing, dryness and soreness of the throat and	
	sinuses, hoarseness, and wheezing. Prolonged or	
	repeated inhalation of wood dusts may cause	
	respiratory irritation, recurrent bronchitis, and	
	prolonged colds. Some species may cause allergic	
	respiratory reactions with asthma-like symptoms in	
	sensitized individuals. Prolonged exposure to wood	
	dust by inhalation has been reported to be associated	
	with nasal and paranasal cancer.	

Note to Physician: If one ounce of treated wood dust per ten pounds of body weight is ingested, acute arsenic intoxication is a possibility. See COMMENTS. Respiratory ailments and pre-existing skin conditions may be aggravated by exposure to wood dust.

Medical Conditions Generally Aggravated by Exposure to Wood Dust: Individuals with a pre-existing disease or a history of ailments involving the skin, kidney, liver, respiratory tract, eyes, or nervous system are at a greater than normal risk of developing adverse effects from woodworking operations with this product. Pre-existing eye, respiratory system, and skin conditions also may be aggravated.

Chronic Overexposure: Wood dusts may be irritating to the eyes, skin, and respiratory tract. Prolonged or repeated inhalation of wood dust may cause respiratory irritation, recurrent bronchitis, and prolonged colds. Depending on the species of wood, recurrent exposure may cause allergic skin and respiratory reactions in some individuals. The principal health effects reported from occupational exposure to sawdust or wood dust generated from untreated wood are dermatitis, rhinitis, conjunctivitis, reduced or suppressed mucociliary clearance

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rates, chronic obstructive lung changes, and nasal sinus cancer. Skin and respiratory sensitization have been reported from exposure to hardwood dust.

Carcinogenicity. Wood dust is classified as a carcinogen by ACGIH, NIOSH, and IARC. This classification is based on an increased incidence of nasal and paranasal cancer in people exposed to wood dusts. Carcinogenicity of wood dust: ACGIH – A1 Confirmed Human Carcinogen (related to wood dusts-hard wood; NIOSH – Occupational carcinogen (related to wood dust); IARC -- Monograph 62, 1995 (related to wood dust)(Group 1 (carcinogenic to humans)). IARC has listed formaldehyde as a probable human carcinogen. This product may contain mold inhibitors or water repellants, neither of which are carcinogenic and are <1% of the finished product.

Ingestion of components (arsenic and chromium) of the liquid preservative has caused toxicity to pregnant laboratory animals and their fetuses. Reproductive performance in laboratory animals was not affected by feeding diets containing arsenic. IARC, the NTP, OSHA and California Proposition 65 do not consistently distinguish among arsenic or chrome species but list inorganic arsenic and chromium and certain chromium compounds as human carcinogens. Cancers in humans have followed from long term: 1) consumption of Fowler's Solution, a medicinal trivalent arsenical; 2) inhalations and skin contact with inorganic trivalent arsenical sheep-dust; 3) the combined inhalation of arsenic trioxide (trivalent arsenical), sulfur dioxide, and other particulates from ore smelting in arsenic trioxide production; and 4) occupational exposure to nonwater-soluble hexavalent chromium. This product is not manufactured with trivalent arsenic or nonwater-soluble hexavalent chromium compounds but may contain some trivalent arsenic as a result of reactions occurring after wood treatment.

SECTION 6 – EXPOSURE CONTROL MEASURES/PERSONAL PROTECTION

Personal Protective Equipment

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Eyes/Face:	Wear safety glasses with side shields when handling, cutting, sanding, or grinding this material.
	Use a face shield for processes that may generate excessive dusts and splinters.
Skin:	Wear puncture resistant work gloves, such as leather when handling. Wash exposed areas promptly
	and thoroughly after skin contact from working with this product and before eating, drinking, using
	tobacco products or the restroom.
Respiratory:	Respirators must be worn if the ambient concentration of airborne contaminants exceeds prescribed
	exposure limits. Dust masks may be worn to avoid inhalation of nuisance dust. Dust masks are not
	adequate protection in environments above the occupational exposure limit.
Ventilation:	Cutting, grinding or sanding should be done outdoors or in a well ventilated area.

SECTION 7 – SAFE HANDLING, STORAGE, DISPOSAL, AND ACCIDENTAL RELEASE MEASURES

Handling Procedures:

- Do not generate airborne dusts in the presence of an ignition source when sawing, cutting or grinding wood.
- Wash hands after handling and before eating.
- Avoid contact of wood dusts with skin and eyes. Avoid breathing wood dusts.
- Do not eat, drink, or smoke when handling this product or in areas where dusts of this product are present.

Storage Procedures

- Maintain good housekeeping procedures, such as sweeping regularly to avoid accumulation of dusts.
- Store away from excessive heat, sparks, and open flame.
- When storing wood, the material should be kept off the ground. Protect from physical damage.

Disposal Procedures

- DO NOT BURN CCA PRESSURE TREATED LUMBER
- Dispose of waste material according to local, State, and Federal Regulations.
- This product is not defined as a U.S. EPA hazardous waste.

Accidental Release Measures

No containment procedures are needed as this product cannot spill or leak the preservative.

Section 8 -- Toxicological Information

CCA Treated Wood: Sawdust from CCA treated wood has been shown not to cause chromosome changes in mice fed sawdust or birth defects in mice or rabbits receiving sawdust in their feed or applied to their skin. Recreational exposure to children using CCA treated wood playground equipment has been evaluated. The results of this study indicated that the amount of arsenic transferred from the wood surface to the child is within the normal variation of total arsenic exposure to children and that the maximum risks of skin cancer associated with the exposure approximates the skin cancer risk from the sunlight experienced during play periods.

Leaf, stem, and fruit of grape plants grown adjacent to CCA treated wood poles did not take up preservative components from the poles above background levels (limits of detection 0.2 and 0.05 ppm for chrome and arsenic, respectively).

This product must not come in contact with food or feed.

No known ingredients which occur at greater than 0.1%, other than those listed above, are listed as carcinogens in the IARC Monographs on the Evaluation of the Carcinogenic Risks of Chemicals to Humans, the National Toxicology Program (NTP) Annual Report on Carcinogens or OSHA 29 CFR 1910.1001-1047 Subpart Z Toxic and Hazardous Substances (Specifically Regulated Substances).

Do not use until a Consumer Information Sheet is read and understood. Wash exposed areas promptly and thoroughly after skin contact from working with this product and before eating or drinking and before using tobacco products or restrooms.

Do not wear contact lenses without proper eye protection when sawing or cutting treated or untreated wood.

CCA Preservative: The effects of industrial exposure to the chrome-copper-arsenic preservative used to treat CCA wood has been evaluated in three independent epidemiology studies. In each case, the authors concluded that workers exposed on a daily basis to the preservatives were at no increased risk of death or disease as a result of their exposure.

California's Proposition 65: This product contains a chemical known to the State of California to cause cancer and reproductive toxicity.

NOTICE: THE INFORMATION AND RECOMMENDATIONS SET FORTH ARE BELIEVED TO BE ACCURATE. HOWEVER, UNIVERSAL FOREST PRODUCTS, INC., MAKES NO WARRANTY WITH RESPECT TO AND DISCLAIMS ALL LIABILITY FROM RELIANCE ON THE INFORMATION.

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